

ABSTRACT OF THE DISCLOSURE

The vector-detecting apparatus of an impedance measuring apparatus comprising a signal source, an automatic balanced bridge, and a vector-detecting apparatus. The vector-detecting apparatus comprises a first and a second filter, whose impulse responses are weighted by a sine function and a cosine function, and the vector of the signals input to the vector-detecting apparatus is determined using the first and second filters. Moreover, the frequency of the signals input to the frequency converter is an integer multiple of the frequency of the signals output from the frequency converter when the input signals are frequency-converted at the step before the vector-detecting apparatus.